

Atlantic Richfield Company

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Anthony R. Brown
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October 10, 2017

Kathy Norton
United States Army Corps of Engineers
1325 J Street, Room 1350
Sacramento, CA 95814-2922

Subject: Notification of Flow Monitoring Equipment Installation Under CERCLA Permit Exemption
Leviathan Mine Site
Alpine County, California

Dear Ms. Norton:

Atlantic Richfield Company (Atlantic Richfield) has prepared this letter to notify the U.S. Army Corps of Engineers of our actions to install flow monitoring equipment in Leviathan Creek at the Leviathan Mine Superfund Site (site) in Alpine County, California (Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA] Docket No. 2008-18). Because the actions are on-site activities as part of a CERCLA response action, no federal, state, or local permits are required pursuant to 42 U.S.C. § 9621(e).

As you indicated on July 18, 2017, to Aaron Murray of Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), the proposed work would typically fall under Nationwide Permit No. 5. This permit covers the placement of scientific measurement devices, including weirs constructed primarily to record water quantity and velocity. Though a permit is not necessary, Atlantic Richfield intends to meet the applicable substantive requirements of Nationwide Permit No. 5 as follows:

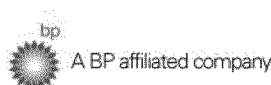
- ☐ limiting fill in Leviathan Creek to less than 25 cubic yards;
- ☐ removing weirs, flumes, and sampling/monitoring equipment after data collection is completed; and
- ☐ restoring the installation sites to pre-installation conditions.

As part of the CERCLA remedial investigation and feasibility study at the site, one v-notch weir plate (at location SW-01) and one flume (at location SF-04) are proposed for installation in Leviathan Creek as shown on Figures 1 and 2.

Location SW-01

At location SW-01, which is collocated with USGS Station 1, the following improvements are planned:

- ☐ Remove sediment and debris behind existing concrete wall. Relocate sediment and debris in coordination with LRWQCB to a previously designated on-site location.



- ☐ Install stainless steel 90-degree v-notch weir plate on upstream side of the existing concrete wall. This will require cutting the concrete wall to create free flow through v-notch.
- ☐ Remove and reset the existing depth sensor as needed.
- ☐ Measure flow using a level sensor in a stilling well upstream of the v-notch. The level sensor and probes will be installed by driving a galvanized steel U-channel post into the channel bottom and attaching the transducer and probes to the post. The level sensor cable will be routed in conduit to a location on the bank.

Flow will be diverted around this location during construction by installing a temporary check dam using sandbags and routing the flow through a PVC pipe that will discharge downstream of the construction area. Care will be taken during construction of the check dam to minimize sediment disturbance, and the intake pipe will be placed above the channel bottom to prevent sediment transport. Erosion protection will be provided at the pipe discharge location by installing a temporary rip-rap or plastic energy dissipation basin. We anticipate that diversion activities at this location will be required for approximately one to two weeks during construction. To the extent possible, the work will be scheduled during times when precipitation is not forecast.

Site access will be via an existing path to location SW-01. Removal of large live trees is not expected. Some small shrubs and trees may have to be limbed to make the area safe for work. Equipment used will be hand tools (shovels, wheelbarrows, etc.); heavy equipment will not be used. Work will be performed in a manner to reduce impacts to the stream and adjacent vegetation. No permanent fill is anticipated to be placed in the channel as part of this project. Temporary fill of up to 4 cubic yards (in the form of removable sandbags) to divert flow during construction may be necessary.

Location SF-04

At location SF-04, a galvanized steel H-flume will be installed approximately 20 feet inside the upstream end of an existing concrete channel. The H-flume will be bolted directly to the existing concrete channel to facilitate removal of the flume at a future date. Flow will be measured using a level sensor in a stilling well attached to the flume. The level sensor cable will be routed in conduit to a location outside the concrete channel to allow access from the paved site road.

Flow will be diverted around this location during construction by installing a temporary check dam using sandbags and routing the flow through a PVC pipe that will discharge downstream of the construction area. Erosion protection at the pipe discharge location will not be needed because it will discharge into the existing concrete channel. It is anticipated that diversion activities at this location will be required for approximately one week during construction. To the extent possible, the work will be scheduled during times when precipitation is not forecast.

Site access will be from an existing paved site road adjacent to the channel. A temporary ladder will be added for personnel to access the channel. Relatively small amounts (approximately 1 to 2 cubic yards) of sediment that has accumulated at the upstream end of the concrete channel will be relocated in coordination with the LRWQCB to a previously designated on-site location.

Equipment used will be hand tools (e.g., shovels, wheelbarrow, buckets, drills, etc.). A reach forklift will be used to lower the flume into place. Use of other heavy equipment is not anticipated. Construction will be performed in a manner to reduce impacts to the stream and adjacent vegetation. No permanent fill is anticipated to be placed in the channel as part of this project. Temporary fill of up to 4 cubic yards (in the form of removable sandbags) to divert flow during construction may be necessary.

Please contact Aaron Murray (Amec Foster Wheeler), Marc Lombardi (Amec Foster Wheeler), or me with any questions regarding this letter.

Sincerely,

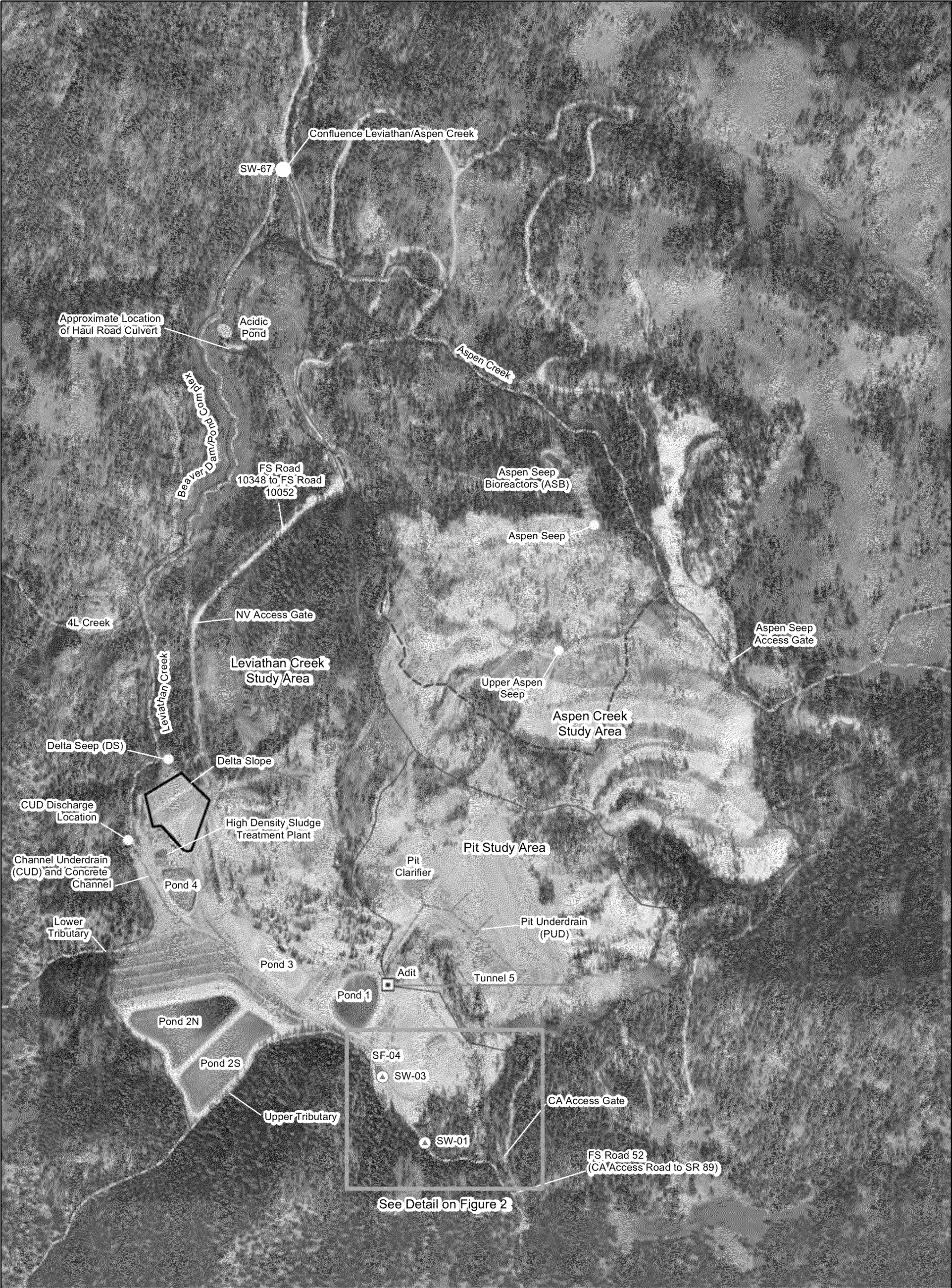


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Attachments: Figure 1 Monitoring Locations
Figure 2 Proposed DPZs, Flume and Geophysical Transects

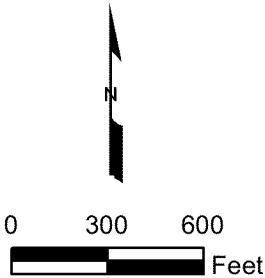
cc: Julie Sullivan, U.S. Environmental Protection Agency, Region 9 – via electronic copy
Douglas Carey, Lahontan Regional Water Quality Control Board – via electronic copy
Scott Ferguson, Lahontan Regional Water Quality Control Board – via electronic copy
Nathan Block, Esq., BP – via electronic copy
Adam Cohen, Esq., Davis Graham & Stubbs, LLP – via electronic copy
Sandy Riese, EnSci, Inc. – via electronic copy
Marc Lombardi, Amec Foster Wheeler – via electronic copy
Grant Ohland, Ohland HydroGeo, LLC – via electronic copy
Dave McCarthy, Copper Environmental Consulting – via electronic copy
Cory Koger, U.S. Army Corps of Engineers – via electronic copy
Greg Reller, Burleson Consulting – via electronic copy
Susan Jamerson, Washoe Tribe of California and Nevada – via electronic copy
Neil Mortimer, Washoe Tribe of California and Nevada – via electronic copy
Norman Harry, Washoe Tribe of California and Nevada – via electronic copy and hard copy
Cale Pete, Washoe Tribe of California and Nevada – via electronic copy
Fred Kirschner, AESE, Inc. – via electronic copy and hard copy

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Explanation

- Surface Water Sample Location
- Creek
- Study Areas
- Leviathan Creek Basin Landslide
- Approximate Extent of Beaver Dam/Pond Complex (August 2014)



- Notes:
1. All locations and boundaries are approximate.
 2. Base map from aerial photograph dated October 22, 2009.

SITE MAP Leviathan Mine Site Alpine County, California		
By: DPV Date: 9/19/2017	Project No. 0013091	
		Figure 1

